

1 **50154/PAN/E349**

ABSTRACT OF THE DISCLOSURE

A semiconductor complex coupled light emitting device is disclosed having a lower cladding layer, an optical cavity formed adjacent the lower cladding layer and an upper cladding layer formed adjacent the optical cavity. The optical cavity includes a lower multi-quantum well active region formed from a first high reactivity material system and an upper multi-quantum well diffraction grating structure formed from a second low reactivity material system that is not subject to oxidation when etched.

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